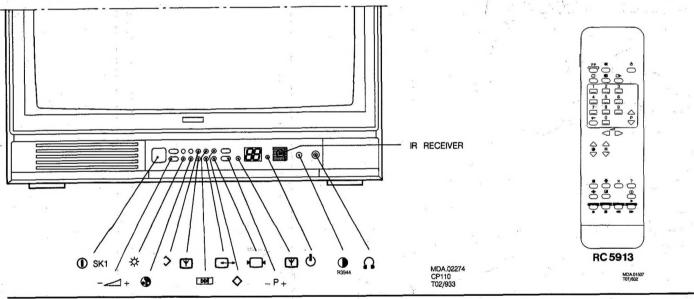


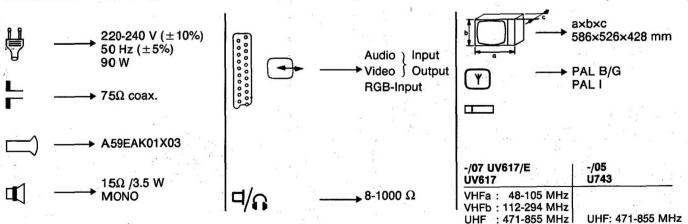


# Service Manual

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

**CHASSIS CP110** 





Documentation Technique Servicio Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Servicio



Subject to modification 4822 727 16702

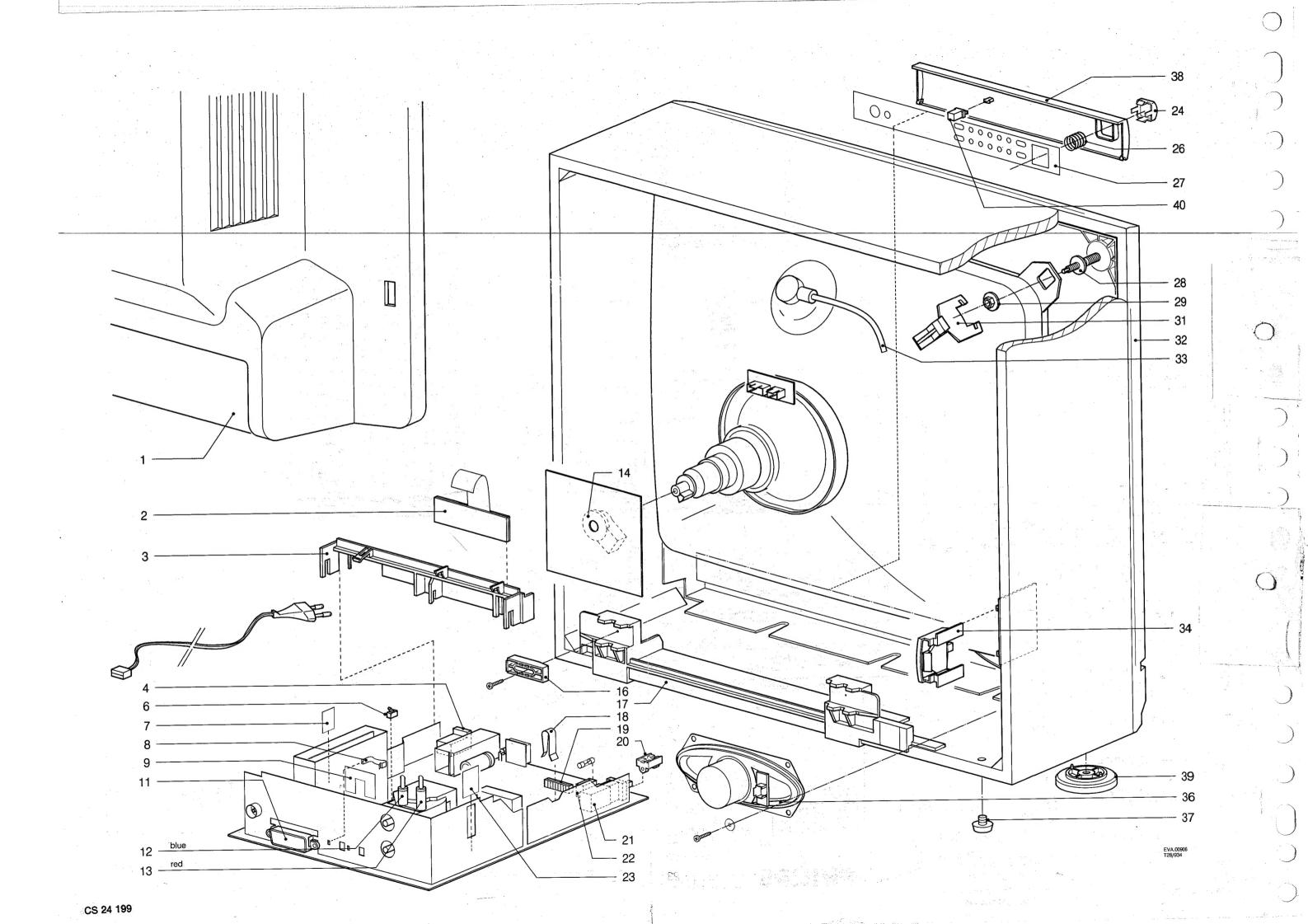
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PHILIPS

Service Consumer Electronic

1	4822 438 20177	Rear cover
2	4822 212 22738	Keyboard
3	4822 404 30871	Bracket
4	4822 462 10281	Headphone socket
6	4822 273 50296	Switch
7	4822 325 10106	Insulator
8	4822 492 63731	Spring
9	4822 325 10105	Insulator
11	4822 267 60243	Socket, scart
12	4822 417 50226	Clamp, blue
13	4822 417 50225	Clamp, red
14	4822 255 70216	Socket, picture tube
16	4822 417 50229	Lock, chassis
17	4822 404 30872	Holder, chassis
18	4822 492 63733	Spring
19	4822 264 50177	Socket, female
20	4822 404 30889	Bracket, mains switch
21	4822 276 12422	Mains switch
22	4822 256 30274	Holder, fuse
23	4822 325 10107	Insulator
24	4822 413 41549	Knob, mains switch
26	4822 492 63732	Spring on mains switch
27	4822 454 12435	Strip, front
28	4822 502 12865	Screw, picture tube
29	4822 505 10903	Nut, picture tube
31	4822 404 30869	Bracket
32	4822 451 80872	Mask
33	4822 320 20153	Cable, HT
34	4822 404 30887	Bracket, rear cover
36	4822 240 20268	Loudspeaker
37	4822 462 41487	Foot rear
38	4822 432 92472	Door
39	4822 462 41486	Foot front
40	4822 417 50252	Locking mechanism
40	4822 462 10336	Stand end for -/05
	4822 218 20689	IR transmitter
	4022 210 20009	in transmitter



## Service Information

1989-04-13 CHASSIS CP 110 CT89-02

(GB)

In the course of production, the carrier panel and the picture tube panel have been modified. These modified panels have been applied in sets whose serial numbers start with QGII, AGII or higher.

Also in sets with serial numbers starting with QG09, AG09, the FLOF teletext has been introduced together with a mask change of the microprocessor:

TMP47C432 - 8188 for TXT CEEFAX TMP47C432 - 8189 for TXT FLOF

So this means that, depending on the microprocessor, either a TXT CEEFAX or a TXT FLOF can be built into a non-teletext set.

This service information gives the modified and new circuit diagrams, the print layouts of the modified and the new printed boards and the parts lists.



Tijdens productie zijn het dragerpaneel en het beeldbuispaneel gewijzigd. Deze gewijzigde panelen zijn toegepast in apparaten waarvan het serienummer begint met QGII, AGII of hoger.

Tevens is in apparaten waarvan het serienummer begint met QG09, AG09 of hoger de FLOF teletekst ingevoerd. Dit is samen gegaan met een masker wijziging van de microprocessor:

TMP47C432 - 8188 voor TXT CEEFAX TMP47C432 - 8189 voor TXT FLOF

Dit betekent dus dat in niet teletekst apparaten afhankelijk van de microprocessor versie een TXT CEEFAX of een TXT FLOF ingebouwd kan worden.

In deze service informatie worden de gewijzigde en nieuwe principe schema's, de print lay-outs van de gewijzigde en nieuwe panelen en de stuklijst gegeven.



En cours de production, la platine porteuse et celle du tube image ont été modifiées. Ces platines sont montées dans des appareils dont le n° de série commence par QGII, AGII et suivants.

Dans les appareils dont le n° de série commence par QG09, AG09 et suivants il y a également eu l'introduction du télétexte FLOF. Ceci a été de pair avec un changement du masque du microprocesseur. A savoir:

TMP47C432 - 8188 pour le TXT CEEFAX TMP47C432 - 8189 pour le TXT FLOF

Ceci signifie donc que dans des appareils ne présentant pas de télétexte, il y a moyen de monter soit un TXT CEEFAX, soit un TXT FLOF, ceci indépendemment de la version du microprocesseur.

Cette Info Service comporte les nouveaux schémas de principe modifiés, les dessins de platines des platines nouvelle et ancienne version et, la liste de pièces.



Während der Produktion wurden die Trägerplatte und die Bildröhreplatte geändert. Diese geänderten Platten sind in Geräten, deren Seriennummer mit QGII, AGII oder höher anfängt, angewandt.

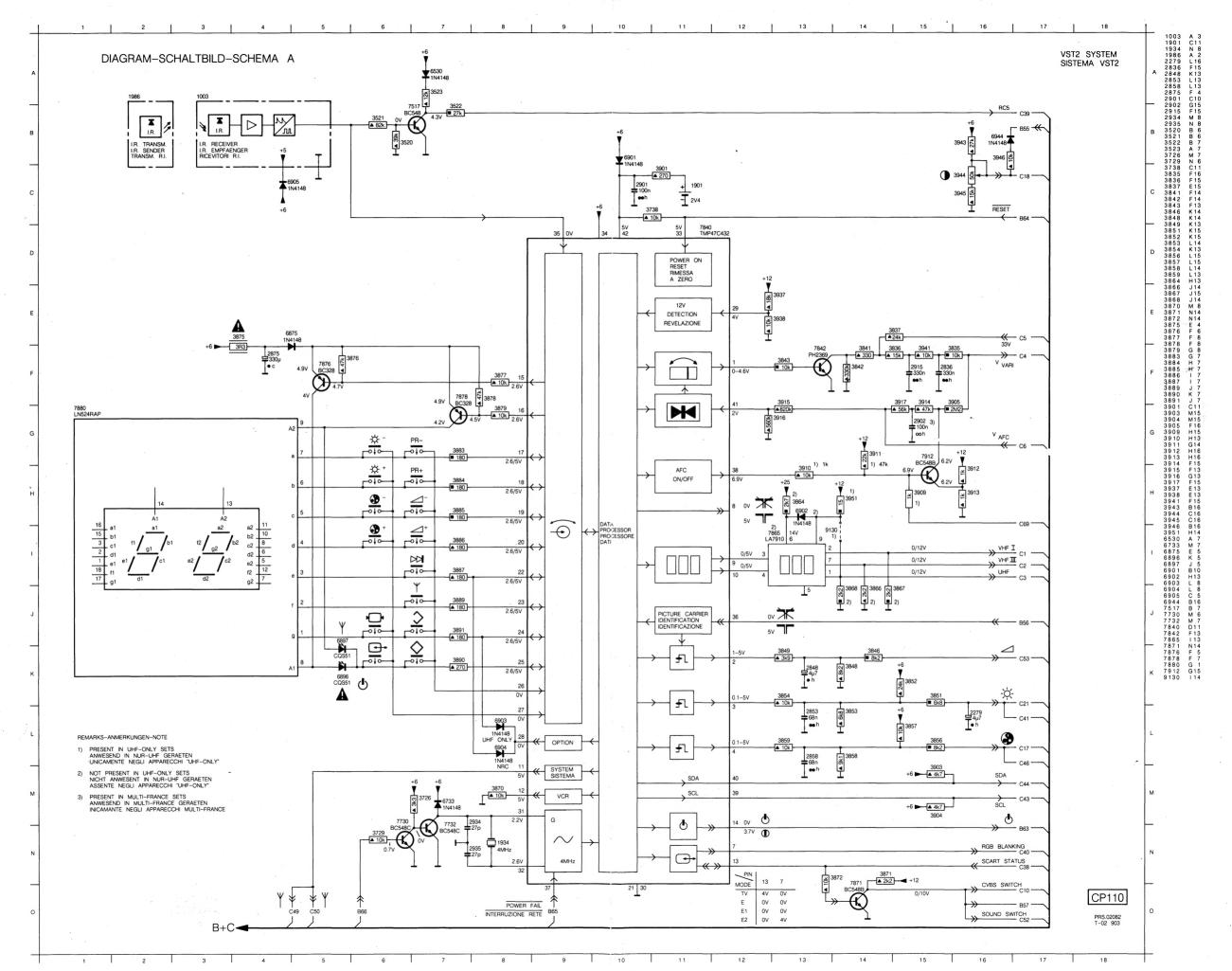
Gleichzeitig wurde in Geräten, deren Seriennummer mit QG09, AG09 oder höher anfängt, der FLOF-Videotext eingeführt. Dies war verbunden mit einer Maskenänderung des Mikroprozessors. Nämlich:

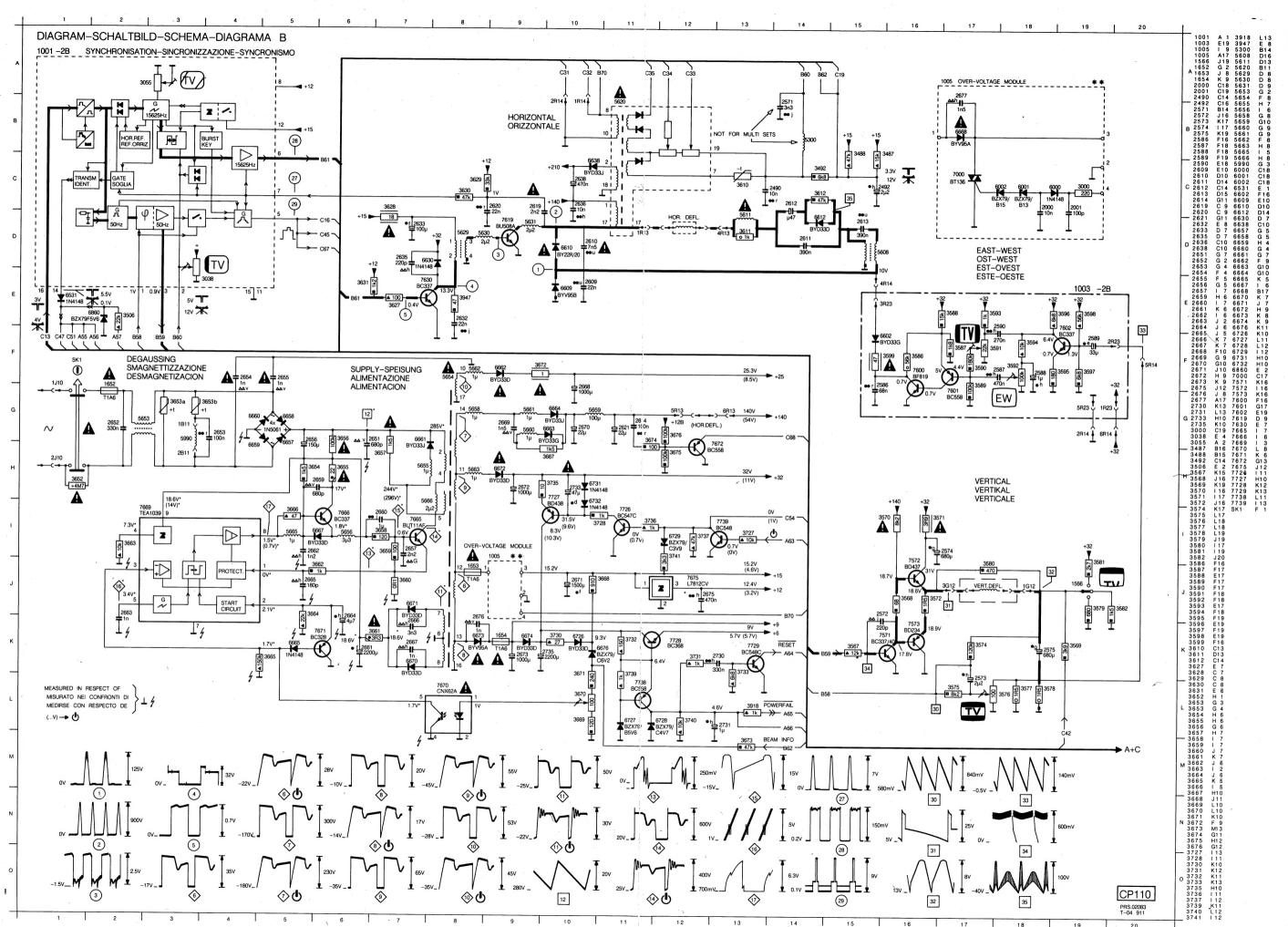
TMP47C432 - 8188 für TXT CEEFAX TMP47C432 - 8189 für TXT FLOF

Das bedeutet also, dass in Nicht-Videotext-Geräte je nach Mikroprozessor-Ausführung ein TXT CEEFAX oder ein TXT FLOF eingebaut werden kann.

In dieser Service-Information sind die geänderten und neuen Prinzipschaltbilder, die Printplattenauslegungen der geänderten und neuen Platten und die Stückliste enthalten.







#### CARRIER PANEL

ganagag					
6			<u>-</u> ~~		
CNX62A	4822 130 80908 4822 209 10576		5108 5109	4822 157 53064 4822 157 53064	
HCF4053BE LA7910	4822 209 10892		5259	4822 157 52287	
LN524RAP	4822 130 90388		5260	4822 157 53065	
L7812CV	5322 209 86176		5260	4822 157 52265 for amtsblatt	
TDA3562A/N5	4822 209 71751	3 (8)	5261	4822 157 52807	
TDA8190	4822 209 70872		5262 5270	4822 157 53093 4822 157 52808	
TEA1039/N4 TMP47C432AP	4822 209 83104 4822 209 72038	mask 8188	5270	4822 157 53250 4822 157 53252	
TMP47C432AP	4822 209 73665	mask 8189	5300	4822 157 51462	
~		W.	5608	4822 157 53069	
<del>(</del> Q			5611	4822 150 50073 line output	
			5620 5629	4822 140 10325 line driver 4822 140 10324	
BC328	4822 130 44104		5630	4822 157	
BC337	4822 130 40855		5631	4822 157 53308	
BC337-40 BC368	4822 130 41344 5322 130 44647		5653	4822 157 53068	
BC547C	4822 130 44503		5654 5655	4822 148 60165 SOPS 4822 157 51195	
BC548	4822 130 40938		5656	4822 157 51195 4822 157 51157	}
BC548B	4822 130 40937		5658	4822 157 51195	
BC548C	4822 130 44196		5659	4822 157	
BC558	4822 130 40941 4822 130 40917		5660	4822 157 51195	
BD234 BD437	4822 130 40982		5661 5662	4822 157 51195 4822 157 51195	
BD437 BD438	4822 130 40995		5663	4822 157 51195	
BUT11AF	4822 130 42679		5665	4822 157 52223	
BU508A	4822 130 60263 4822 130 41594		5666	4822 157	
PH2369	4022 100 41094				
<b>→</b>					
			F 2 \$ 2.5		
BYD33D	4822 130 42488		3102	4822 111 30499 4.7 Ω 0.33W	
BYD33G	4822 130 42489	•	3280 3283	$4822 \ 100 \ 20148$ 1 kΩ potm. $4822 \ 111 \ 30593$ 3.3 Ω 0.33W	
BYD33J	4822 130 42606	*	3570	4822 116 51166 8.2 k $\Omega$ 2.5W	
BYV95A	4822 130 41601 4822 130 41486		3571	4822 111 30821 3.9 $\Omega$ 0.5W	,
BYV95B BY228/20	4822 130 41466		3576	4822 101 10818 100 $\Omega$ potm.	
BZX79-C3V9	4822 130 31981		3610	4822 116 30323 150 kΩ NTC	
BZX79-C4V7	4822 130 34174		3628 3653	4822 111 30504 6.8 Ω 0.33W 4822 116 40065 PTC	
BZX79-C5V6	4822 130 34173		3656	4822 116 80288 100 kΩ 2W	
BZX79-C6V2	4822 130 80303		3657	4822 116 81761 1.5 kΩ 7W	` `
CQS51-4 ZTK33B	4822 130 80309 4822 130 30959		3660	4822 113 80429 0.1 $\Omega$ 2W	
1N4148-75	4822 130 33939		3667 3670	$5322 \ 116 \ 54272$ $1.5 \ k\Omega$ $2.5W$ $4822 \ 100 \ 10361$ $100$ $\Omega$ potm.	
1N5061	4822 130 31933		3670 3672	4822 100 10361 100 $\Omega$ potm. 4822 111 30483 1 $\Omega$ 0.33W	
			3875	4822 111 30593 3.3 Ω 0.33W	
'			3909	4822 116 52204 1 kΩ 0,125 W	
			3944	4822 101 10819 50 kΩ potm.	

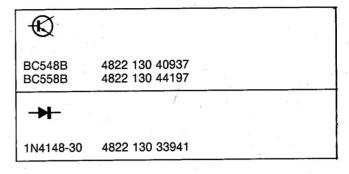
### CARRIER PANEL

-11-			<b>—</b>		
2113 2123 2267 2521 2526	4822 124 41334 4822 124 40435 4822 125 50045 4822 124 40434 4822 124 40434	470 μF 35 V 10 μF 50 V 20 pF trimm. 22 μF 35V 22 μF 35V	10J 11B 12G 13R 14R	4822 290 60626 4822 267 40653 4822 265 30273 4822 267 30546 4822 267 30546	2P 2P 3P 6P 6P
2571 2610 2611 2612 2619	4822 122 30099 5322 121 44357 4822 121 40479 4822 124 22417 4822 121 41339	3.3 nF 100V 7.5 nF 2kV 390 nF 250V 470 nF 160V 2.2 nF 2kV	15G 16R 17 18G 19G	4822 265 40252 4822 267 40653 4822 264 50177 4822 266 30276 4822 265 40503	7P 2P 10P for coil cable 4P 5P
2620 2621 2638 2652	4822 121 40516 4822 124 22257 4822 121 51252 4822 121 51424	22 nF 250V 22 μF 250V 470 nF 63V 330 nF 250V	20G 21G	4822 265 40469 4822 265 40471	6P 8P
2656 2663 2668	4822 121 31424 4822 124 22172 4822 121 41531 4822 124 40724	150 μF 385V 1000 pF 250V 1000 μF 35V	Various	4822 212 22746	IR receiver
2670 2672 2673	4822 124 22257 4822 124 40724 4822 124 40201	22 μF 250V 1000 μF 35V 1000 μF 16V	1001 1001 1001 1001	4822 212 22739 4822 212 22771 4822 212 22769 4822 212 22885	SYNC/IF-B/G SYNC/IF-I SYNC/IF-Multi Fr SYNC/IF-Multi Eur
2735 2934 2935	4822 124 40723 4822 122 32149 4822 122 32149	2200 μF 16V 27 pF 100V 27 pF 100V	1001 1002 1002	4822 212 22886 4822 210 40273 4822 210 40279	SYNC/IF K-B/G UV617 UV617/E
			1002 1002 1030	4822 210 10299 4822 210 50118 4822 276 12422	UV627 U743 mains-switch (SK1)
1652 1653 1654	4822 253 30024 4822 253 10046 4822 253 10046	T1.6A T1.6A T1.6A	1059 1059 1059 1103	4822 270 12422 4822 212 22738 4822 276 80317 4822 242 71841 4822 242 70714	keyboard foil assy. keyboard foil assy. multi filter SFE6.0 MA filter SFE5.5 MA
10J	4822 265 40596	2P	1104 1104 1262 1267	4822 242 72059 4822 242 71841 4822 157 51056 4822 242 70626	filter SFT6.5 MA filter SFT6.0 MA delay line DL330 crystal 8.867238 MHz
11B 12G 13R 14R	4822 265 30389 4822 265 30407 4822 267 40722 4822 267 40722	2P 3P 6P 6P	1270 1566 1901 1934	4822 320 40096 4822 273 50296 4822 138 10229 4822 242 70831	delay line DL701 switch 3P battery 2.5V filter 4 MHz
15G 16R 18G	4822 290 40295 4822 267 40665 4822 417 50217	7P 3P 4P	1904	4822 242 70831 4822 256 30274 4822 462 10281 4822 267 60243	fuse holder headphone socket scart socket
19G 20G 21G	4822 267 40648 4822 267 50591 4822 264 50148	5P 6P 8P		4822 492 63733 4822 492 63731	slide spring fix.transistor spring fix. transistor

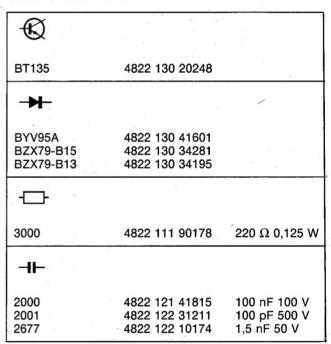
#### PICTURE TUBE PANEL

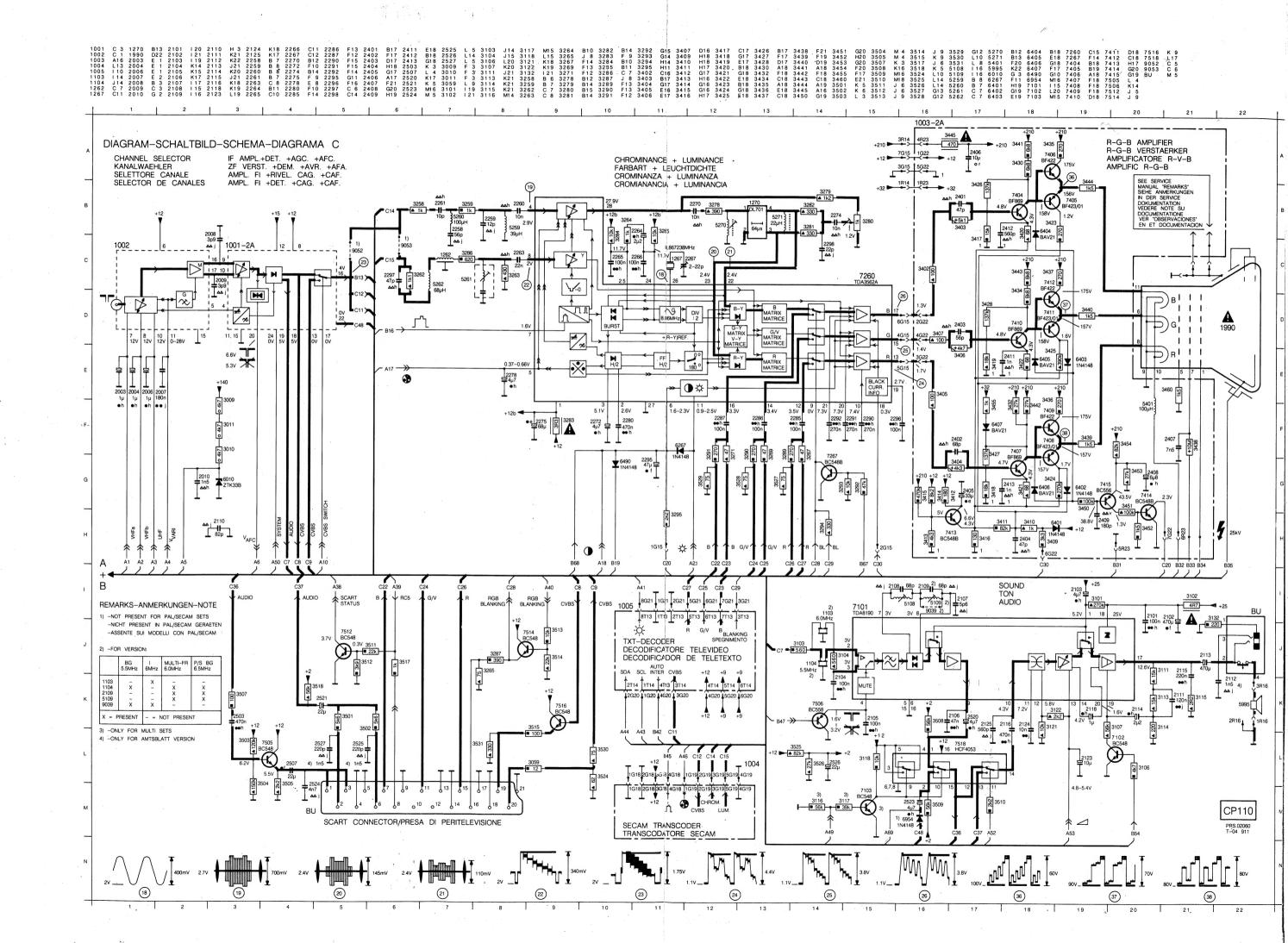
<b>(</b> C)	^	
	4822 130 40855	
BC337 BC548B	4822 130 40937	
BC556 BC558	4822 130 40989 4822 130 40941	
BF422 BF423/01	4822 130 41782 4822 130 60703	
BF819 BF869	4822 130 42159 4822 130 41773	
<b>→</b>		
BAV21	4822 130 30842	
BYD33G 1N4148-75	4822 130 42489 4822 130 33939	
5401	4822 157 53941	
<b></b>		
3403 3426	5322 116 53741 4822 116 80327	$5.1~~k\Omega~~0.5~W < 137~~k\Omega~~0.5~W$
3427 3428	4822 116 80327 4822 116 80327	137 k $\Omega$ 5 W 137 k $\Omega$ 0.5 W
3439	4822 116 52399	$1.5~k\Omega~0.5~W$
3440 3444	4822 116 52399 4822 116 52399	1.5 k $\Omega$ 0.5 W 1.5 k $\Omega$ 0.5 W
3445	5322 116 80275	470 $\Omega$ 0.5 W
3460 3591	4822 111 50518 4822 100 10051	1.5 k $\Omega$ 0.5 W 22 k $\Omega$ potm.
3592 3599	4822 100 10052 5322 116 80277	$\begin{array}{ccc} 100 & k\Omega & \text{potm.} \\ 47 & \Omega & 0.5W \end{array}$
-11-		
2407	4822 122 33376	7,5 nF 1kV
-		
22G 23R	4822 290 40295 4822 267 40722	7P 6P
<b>—</b>		
22G	4822 265 40252	7P
23R	4822 267 30546 4822 255 70216	6P socket PT

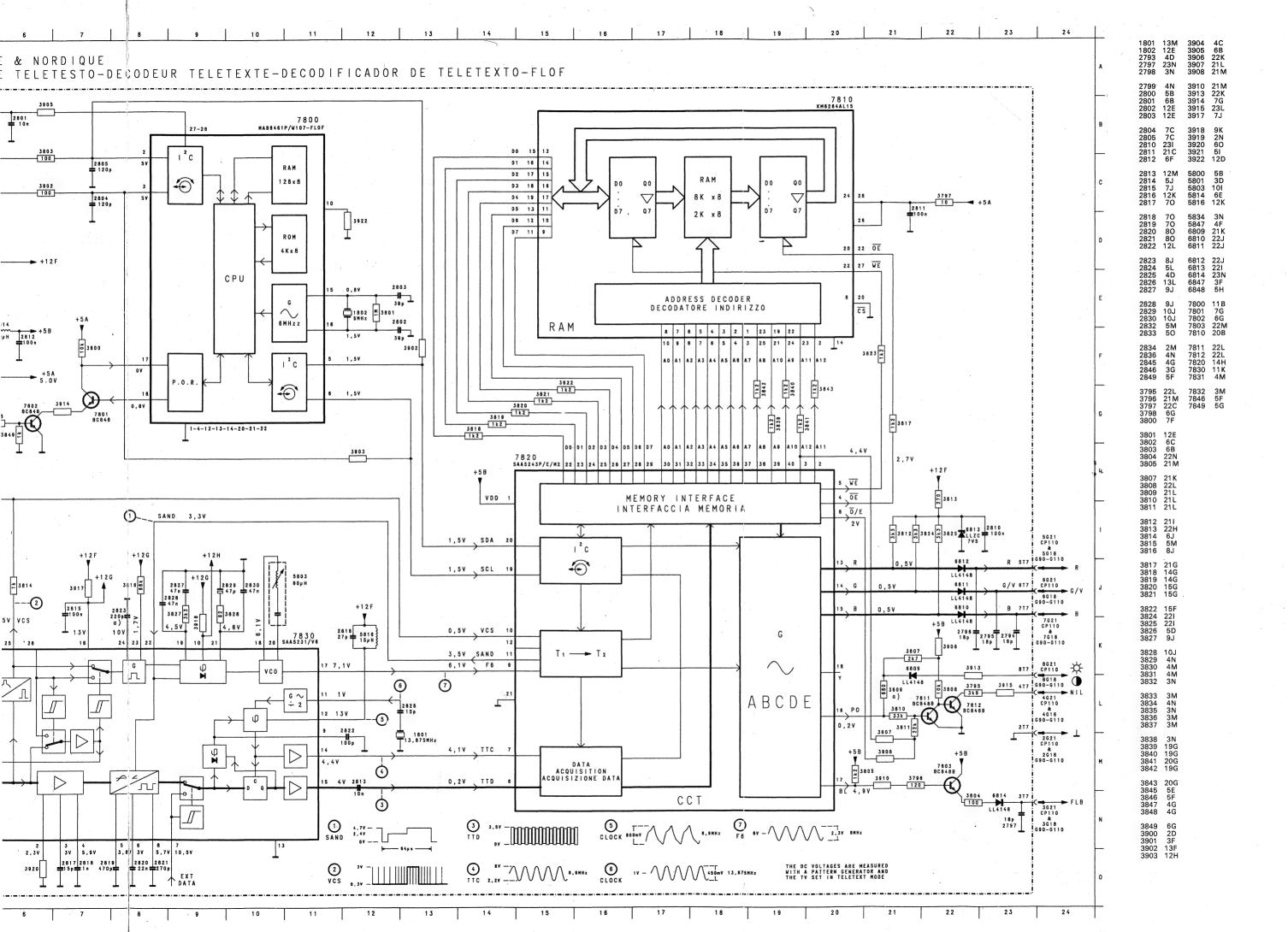
#### **MUTE PANEL**

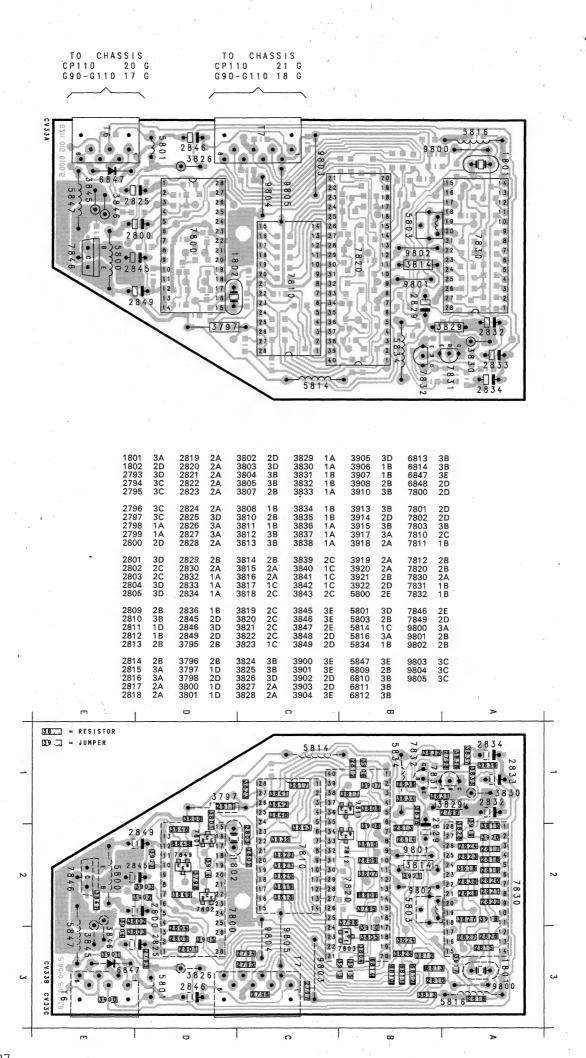


#### **OVERVOLTAGE PANEL**









REMARKS Mechanic	2) not for NO	IORDIC sets DRDIC sets	3800 3801 3802 3803 3804	4822 111 90249 5322 111 90094 5322 111 90091 5322 111 90091 4822 111 90091	10k 2% 0.125W 1M 5% 0.125W 100R 2% 0.125W 100R 2% 0.125W 100R 2% 0.125W	
21 22	4822 265 40469 4822 265 40471	6p female gold plated 8p female gold plated	3805 3807 3808 3808 3809	5322 111 90096 4822 111 90569 4822 111 90249 4822 111 90162	1k2 2% 0.125W 2k7 2% 0.125W 10k 2% 0.125W 680R 2% 0.125W	
Various p	arts		3810 3811	5322 111 90267 4822 111 90251	33k 2% 0.125W 22k 2% 0.125W	
1801 1802	4822 242 71417 4822 242 71508	crystal 13.875 MHz filter 6.0 MHz	3812 3813 3814 3815	4822 111 90157 4822 111 90154 4822 116 52204 4822 111 90151	3k3 2% 0.125W 270R 2% 0.125W 1k 5% 0.5W 1k5 2% 0.125W	
<b>-1-</b> 2793 2794	4822 122 32542 4822 122 31769	47nF 10% 50V 18pF 5% 50V	3816 3817 3818 3819 3820	4822 111 90202 5322 111 90096 5322 111 90096 5322 111 90096 5322 111 90096	68k 2% 0.125W 1k2 2% 0.125W 1k2 2% 0.125W 1k2 2% 0.125W 1k2 2% 0.125W	
2795 2796 2797 2799 1) 2800	4822 122 31769 4822 122 31769 4822 122 31769 4822 122 33637 4822 124 41584	18pF 5% 50V 18pF 5% 50V 18pF 5% 50V 220pF 10% 50V 100μF 20% 10V	3821 3822 3823 3824 3825	5322 111 90096 5322 111 90096 5322 111 90096 4822 111 90157 4822 111 90157	1k2 2% 0.125W 1k2 2% 0.125W 1k2 2% 0.125W 3k3 2% 0.125W 3k3 2% 0.125W	
2801 2802 2803 2804 2805	4822 122 33478 4822 122 31972 4822 122 31972 4822 122 31766 4822 122 31766	10nF 20% 39pF 5% 50V 39pF 5% 50V 120pF 5% 50V 120pF 5% 50V	3826 3827 3828 3829 1) 3830 1)	4822 111 30494 4822 111 90157 4822 111 90124 4822 116 52211 4822 116 52379	2R7 5% 0.33W 3k3 2% 0.125W 82R 2% 0.125W 150R 5% 0.5W 82R 5% 0.5W	
2810 2811 2812 2813	4822 122 33496 4822 122 33496 4822 122 33496 4822 122 33478	100nF 10% 63V 100nF 10% 63V 100nF 10% 63V 10nF 20%	3831 1) 3832 1) 3833 1) 3834 1)	4822 111 90162 5322 111 90092 5322 111 90092 4822 111 90162	680R 2% 0.125W 1k 2% 0.125W 1k 2% 0.125W 680R 2% 0.125W	
2814 2815 2816 2817 2818	4822 122 31773 4822 122 33496 4822 122 31825 4822 122 32504 5322 122 31647	560pF 5% 50V 100nF 10% 63V 27pF 5% 50V 15pF 5% 50V	3835 1) 3836 1) 3837 1) 3838 1) 3839	5322 111 90113 4822 111 90543 5322 111 90092 4822 111 90543 5322 111 90096	560R 2% 0.125W 47k 2% 0.125W 1k 2% 0.125W 47k 2% 0.125W 1k2 2% 0.125W	
2819 2820 2821 2822	4822 122 31727 4822 122 31797 4822 122 32142 4822 122 31765	470pF 5% 22nF 10% 63V 270pF 5% 63V 100pF 5% 50V	3840 3841 3842 3843	5322 111 90096 5322 111 90096 5322 111 90096 5322 111 90096	1k2 2% 0.125W 1k2 2% 0.125W 1k2 2% 0.125W 1k2 2% 0.125W	
2823 2824 2825 2826 2827	4822 122 33637 4822 122 32891 4822 124 41568 4822 122 32504 4822 122 32542	220pF 10% 68nF 20% 50V 100μF 20% 16V 15pF 5% 50V 47nF 10% 50V	3845 3846 3847 3848	4822 111 30531 4822 111 30531 4822 111 90124 5322 111 90242	68R 5% 0.33W 68R 5% 0.33W 82R 2% 0.125W 180R 2% 0.125W	
2828 2829 2830 2832 1)	4822 122 32542 4822 124 41506 4822 122 32542 4822 124 41585	47nF 10% 50V 47μF 20% 16V 47nF 10% 50V 2.2μF 20% 50V	3849 3900 3901 3904	5322 111 90092 4822 111 90163 4822 111 90163 4822 111 90163	1k 2% 0.125W jumper jumper jumper	
2833 2) 2834 1) 2836 1) 2845	4822 124 41585 4822 124 41626 4822 122 31766 4822 124 41584	2.2μF 20% 50V 10 μF 20% 16V 120pF 5% 50V 100μF 20% 10V	3905 3906 3908 3910	4822 111 90163 4822 111 90163 4822 111 90163 4822 111 90163	jumper jumper jumper jumper	
2846 2849	4822 124 41554 4822 124 41586	220μF 20% 10V 15 μF 20% 16V	3913 3914 3915 3917	4822 111 90163 4822 111 90163 4822 111 90163 4822 111 90163	jumper jumper jumper jumper	
3795 3796 3797 3798	4822 111 90571 4822 111 90339 4822 116 52176 4822 111 90339	3k9 2% 0.125W 120R 2% 0.125W 10R 5% 0.5W 120R 2% 0.125W	3918 3919 3921 3922	4822 111 90163 4822 111 90163 4822 111 90163 4822 111 90163	jumper jumper jumper jumper	

#### 1005 TXT FLOF MODULE

	5800	4822 156 20966	47μH 10%
	5801	4822 157 53252	22μH 5%
	5803	4822 157 52825	60μH
-	5814 5816	4822 157 52623 4822 157 53608 4822 157 52224	10μΗ 10% 15μΗ 10%
	5834 1)	4822 157 53001	27μH 10%
	5847	4822 157 51157	3.3μH 10%
	<b>→</b>		
	6809	4822 130 80446	LL4148
	6810	4822 130 80446	LL4148
	6811	4822 130 80446	LL4148
	6812	4822 130 80446	LL4148
	6813	4822 130 80906	LLZ-C7V5
	6814	4822 130 80446	LL4148
	6847	4822 130 42489	BYD33G
	6848	4822 130 80905	LLZ-F5V1
	7800	4822 209 72355	MAB8461P/W107
	7801	4822 130 61207	BC848
	7802	4822 130 61207	BC848
	7803	5322 130 41982	BC848B
	7810	4822 209 73584	KM6264AL-15
	7811	5322 130 41982	BC848B
	7812	5322 130 60159	BC846B
	7820	4822 209 73879	SAA5243P/E/M2
	7830	4822 209 72972	SAA5231/V6
	7831 1)	4822 130 40962	BC558A
	7832 1)	4822 130 40937	BC548B
	7846	5322 130 44921	BD943
	7849	5322 130 42012	BC858

